

# Section 4

## Bicyclist-Motor Vehicle Crashes, 2002

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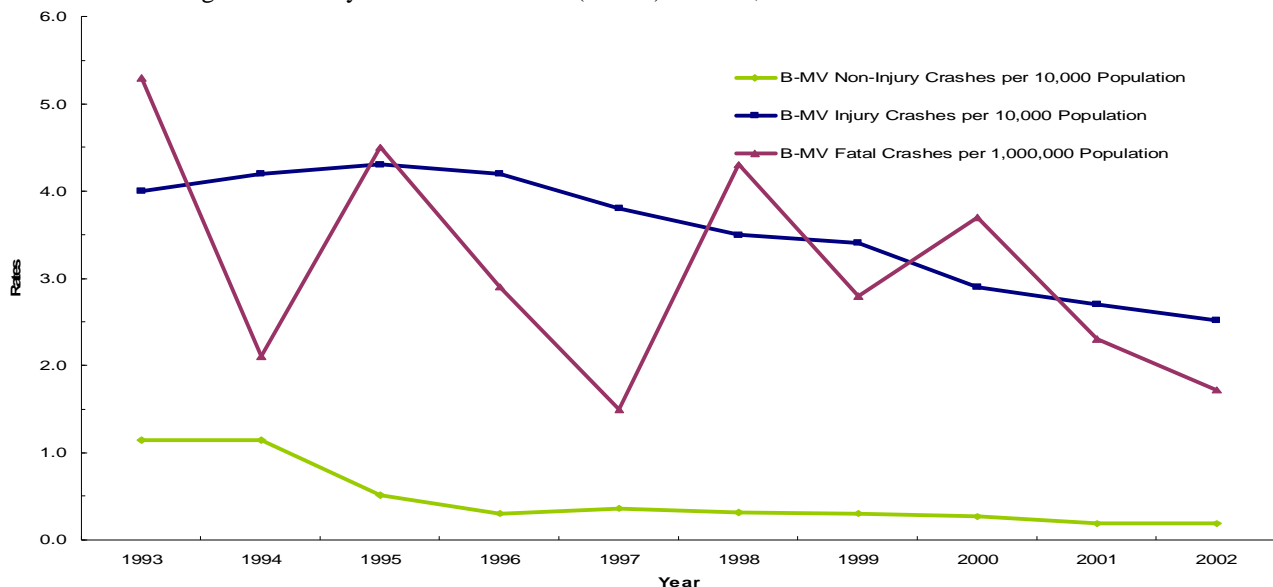
# Bicyclist-Motor Vehicle Crashes 1993 - 2002

Table 4.01 and Figure 4.01 shows the trends in bicyclist-motor vehicle (B-MV) crashes for 1993 to 2002. The rates of total bicyclist-motor vehicle crashes and injury crashes have decreased steadily since 1994, while fatal crashes varied year to year. Part of the decrease in reported bicycle crashes from 1997 to 2002 is due to a change in reporting criteria initiated in 1997 that excluded private property crashes. As a result, bicycle crashes that occurred in a parking lot, driveway, sidewalk, and other private roadways would not be included from 1997 forward. Therefore, the years 1993-1996 cannot be compared with years 1997-2002. The small number of bicyclist-motor vehicle fatal crashes makes it difficult to compare increases and decreases from year to year.

Table 4.01 Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 1993 - 2002

Year	B-MV Non-Injury Crashes		B-MV Injury Crashes		B-MV Fatal Crashes		B-MV Total Crashes	
	Number	Rate per 10,000 Population	Number	Rate per 10,000 Population	Number	Rate per 1,000,000 Population	Number	Rate per 10,000 Population
1993	216	1.1	751	4.0	10	5.3	977	5.2
1994	224	1.2	819	4.2	4	2.1	1,047	5.4
1995	103	0.5	860	4.3	9	4.5	972	4.9
1996	61	0.3	858	4.2	6	2.9	925	4.5
1997	74	0.4	778	3.8	3	1.5	855	4.2
1998	67	0.3	728	3.5	9	4.3	804	3.8
1999	66	0.3	732	3.4	6	2.8	804	3.8
2000	58	0.3	625	2.9	8	3.7	691	3.2
2001	42	0.2	609	2.7	5	2.3	656	3.0
2002	44	0.2	585	2.5	4	1.7	633	2.7

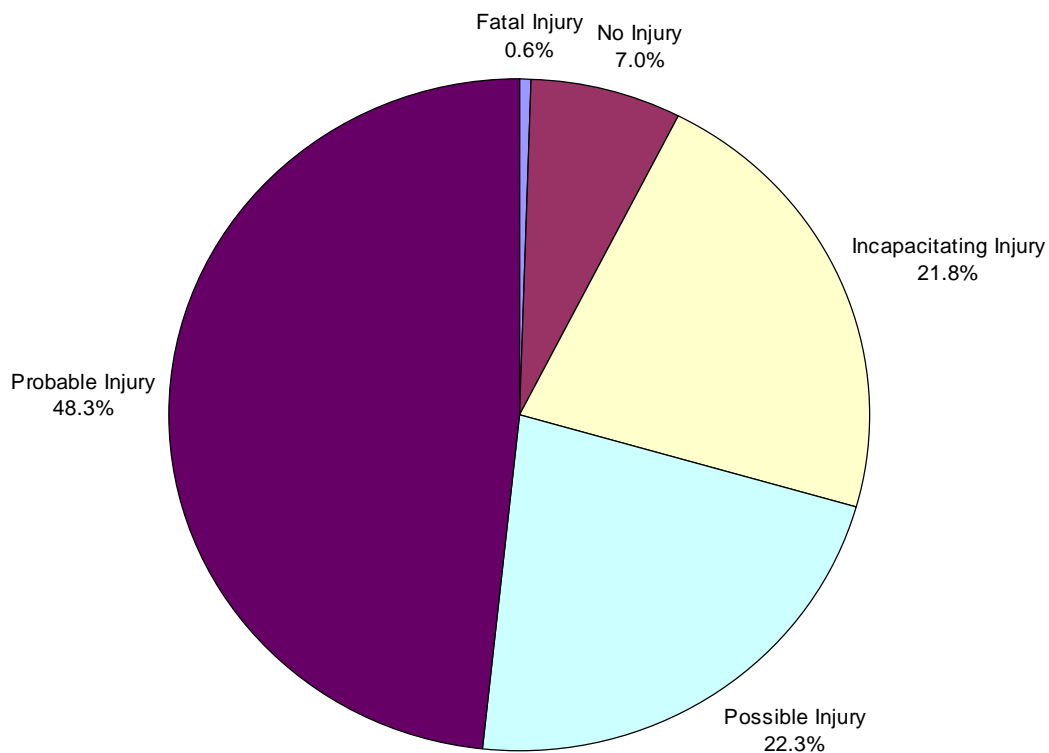
Figure 4.01 Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 1993 - 2002



# Bicyclist-Motor Vehicle Crash Severity

Figure 4.02 shows the breakdown of bicyclist-motor vehicle crash severity. Almost all bicyclist-motor vehicle crashes resulted in an injury (93.0%) compared to 37.2% of all motor vehicle crashes (see Figure 1.03). However, bicyclist-motor vehicle crashes resulted in only a slightly larger percentage (0.6%) of fatal crashes compared to all motor vehicle crashes (0.5%).

Figure 4.02 Severity of Bicyclist-Motor Vehicle Crashes as Reported by Police, Utah 2002 (n=633)



# Bicyclist-Motor Vehicle Crashes by County

The rates of total bicycle-involved motor vehicle crashes, injury crashes and fatal crashes by county are shown in Table 4.02. There are two different rates given; one based on the miles traveled by motor vehicles in the county, and another on the population of the county. The top three counties for total bicyclist-involved motor vehicle crashes based on miles traveled were Salt Lake, Utah, and Weber. The counties with bicyclist-involved motor vehicle fatal crashes were Beaver, Weber, and Salt Lake Counties.

Table 4.02 Bicyclist-Motor Vehicle (B-MV) Crashes by County, Utah 2002

County	B-MV Non-Injury Crashes			B-MV Injury Crashes			B-MV Fatal Crashes			B-MV Total Crashes		
	Number	Rate per	Rate per	Number	Rate per	Rate per	Number	Rate per	Rate per	Number	Rate per	Rate per
		100	10,000		100	10,000		1000	10,000		100	10,000
		MVMT	Population		MVMT	Population		MVMT	Population		MVMT	Population
Beaver	0	0.0	0.0	1	0.4	1.6	1	4.1	1.6	2	0.8	3.2
Box Elder	0	0.0	0.0	14	1.4	3.2	0	0.0	0.0	14	1.4	3.2
Cache	1	0.1	0.1	25	3.0	2.6	0	0.0	0.0	26	3.1	2.7
Carbon	1	0.3	0.5	3	0.9	1.5	0	0.0	0.0	4	1.2	2.0
Daggett	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Davis	4	0.2	0.2	46	2.0	1.8	0	0.0	0.0	50	2.2	2.0
Duchesne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Emery	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Garfield	0	0.0	0.0	1	0.7	2.1	0	0.0	0.0	1	0.7	2.1
Grand	0	0.0	0.0	2	0.7	2.4	0	0.0	0.0	2	0.7	2.4
Iron	0	0.0	0.0	5	0.8	1.4	0	0.0	0.0	5	0.8	1.4
Juab	0	0.0	0.0	2	0.5	2.3	0	0.0	0.0	2	0.5	2.3
Kane	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Millard	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Morgan	0	0.0	0.0	1	0.8	1.4	0	0.0	0.0	1	0.8	1.4
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Salt Lake	20	0.3	0.2	289	3.6	3.1	1	0.1	0.0	310	3.9	3.4
San Juan	0	0.0	0.0	1	0.4	0.7	0	0.0	0.0	1	0.4	0.7
Sanpete	0	0.0	0.0	2	0.9	0.8	0	0.0	0.0	2	0.9	0.8
Sevier	0	0.0	0.0	4	1.0	2.1	0	0.0	0.0	4	1.0	2.1
Summit	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Tooele	1	0.1	0.2	2	0.2	0.4	0	0.0	0.0	3	0.4	0.7
Uintah	0	0.0	0.0	5	1.7	1.9	0	0.0	0.0	5	1.7	1.9
Utah	13	0.4	0.3	116	3.5	3.0	0	0.0	0.0	129	3.8	3.3
Wasatch	0	0.0	0.0	2	0.8	1.2	0	0.0	0.0	2	0.8	1.2
Washington	1	0.1	0.1	14	1.4	1.4	0	0.0	0.0	15	1.5	1.5
Wayne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Weber	3	0.2	0.2	50	3.1	2.5	2	1.3	0.1	55	3.5	2.8
Statewide	44	0.2	0.2	585	2.6	2.5	4	0.2	0.0	633	2.8	2.7

Table 4.03 compares the rates of bicyclist-motor vehicle crashes by county in 2001 to 2002. Most counties experienced only slight changes in total bicyclist-motor vehicle crashes and injury crashes from 2001 to 2002.

Table 4.03. Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2001 - 2002

County	B-MV Non-Injury Crashes				B-MV Injury Crashes				B-MV Fatal Crashes				B-MV Total Crashes			
	2001		2002		2001		2002		2001		2002		2001		2002	
	Rate per 100		Rate per 100		Rate per 100		Rate per 100		Rate per 1000		Rate per 1000		Rate per 100		Rate per 100	
	Number	MVMT	Number	MVMT	Number	MVMT	Number	MVMT	Number	MVMT	Number	MVMT	Number	MVMT	Number	MVMT
Beaver	0	0.0	0	0.0	1	0.4	1	0.4	0	0.0	1	4.1	1	0.4	2	0.8
Box Elder	0	0.0	0	0.0	6	0.6	14	1.4	0	0.0	0	0.0	6	0.6	14	1.4
Cache	1	0.1	1	0.1	23	2.9	25	3.0	0	0.0	0	0.0	24	3.0	26	3.1
Carbon	0	0.0	1	0.3	4	1.2	3	0.9	0	0.0	0	0.0	4	1.2	4	1.2
Daggett	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Davis	5	0.2	4	0.2	48	2.2	46	2.0	0	0.0	0	0.0	53	2.4	50	2.2
Duchesne	0	0.0	0	0.0	1	0.5	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0
Emery	0	0.0	0	0.0	2	0.6	0	0.0	0	0.0	0	0.0	2	0.6	0	0.0
Garfield	0	0.0	0	0.0	0	0.0	1	0.7	0	0.0	0	0.0	0	0.0	1	0.7
Grand	0	0.0	0	0.0	7	2.5	2	0.7	0	0.0	0	0.0	7	2.5	2	0.7
Iron	0	0.0	0	0.0	7	1.2	5	0.8	0	0.0	0	0.0	7	1.2	5	0.8
Juab	0	0.0	0	0.0	1	0.3	2	0.5	0	0.0	0	0.0	1	0.3	2	0.5
Kane	0	0.0	0	0.0	3	2.4	0	0.0	0	0.0	0	0.0	3	2.4	0	0.0
Millard	0	0.0	0	0.0	1	0.2	0	0.0	1	2.4	0	0.0	2	0.5	0	0.0
Morgan	0	0.0	0	0.0	0	0.0	1	0.8	1	8.3	0	0.0	1	0.8	1	0.8
Piute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rich	0	0.0	0	0.0	2	4.6	0	0.0	0	0.0	0	0.0	2	4.6	0	0.0
Salt Lake	25	0.3	20	0.3	288	3.7	289	3.6	2	0.3	1	0.1	315	4.1	310	3.9
San Juan	0	0.0	0	0.0	2	0.7	1	0.4	0	0.0	0	0.0	2	0.7	1	0.4
Sanpete	0	0.0	0	0.0	2	0.9	2	0.9	0	0.0	0	0.0	2	0.9	2	0.9
Sevier	0	0.0	0	0.0	2	0.5	4	1.0	0	0.0	0	0.0	2	0.5	4	1.0
Summit	0	0.0	0	0.0	6	0.9	0	0.0	0	0.0	0	0.0	6	0.9	0	0.0
Tooele	1	0.1	1	0.1	3	0.4	2	0.2	0	0.0	0	0.0	4	0.5	3	0.4
Uintah	0	0.0	0	0.0	2	0.7	5	1.7	0	0.0	0	0.0	2	0.7	5	1.7
Utah	4	0.1	13	0.4	121	3.8	116	3.5	0	0.0	0	0.0	125	4.0	129	3.8
Wasatch	0	0.0	0	0.0	8	3.1	2	0.8	0	0.0	0	0.0	8	3.1	2	0.8
Washington	2	0.2	1	0.1	11	1.2	14	1.4	0	0.0	0	0.0	13	1.4	15	1.5
Wayne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Weber	4	0.3	3	0.2	58	3.8	50	3.1	1	0.7	2	1.3	63	4.2	55	3.5
Statewide	42	0.2	44	0.2	609	2.6	585	2.6	5	0.2	4	0.2	656	2.8	633	2.8

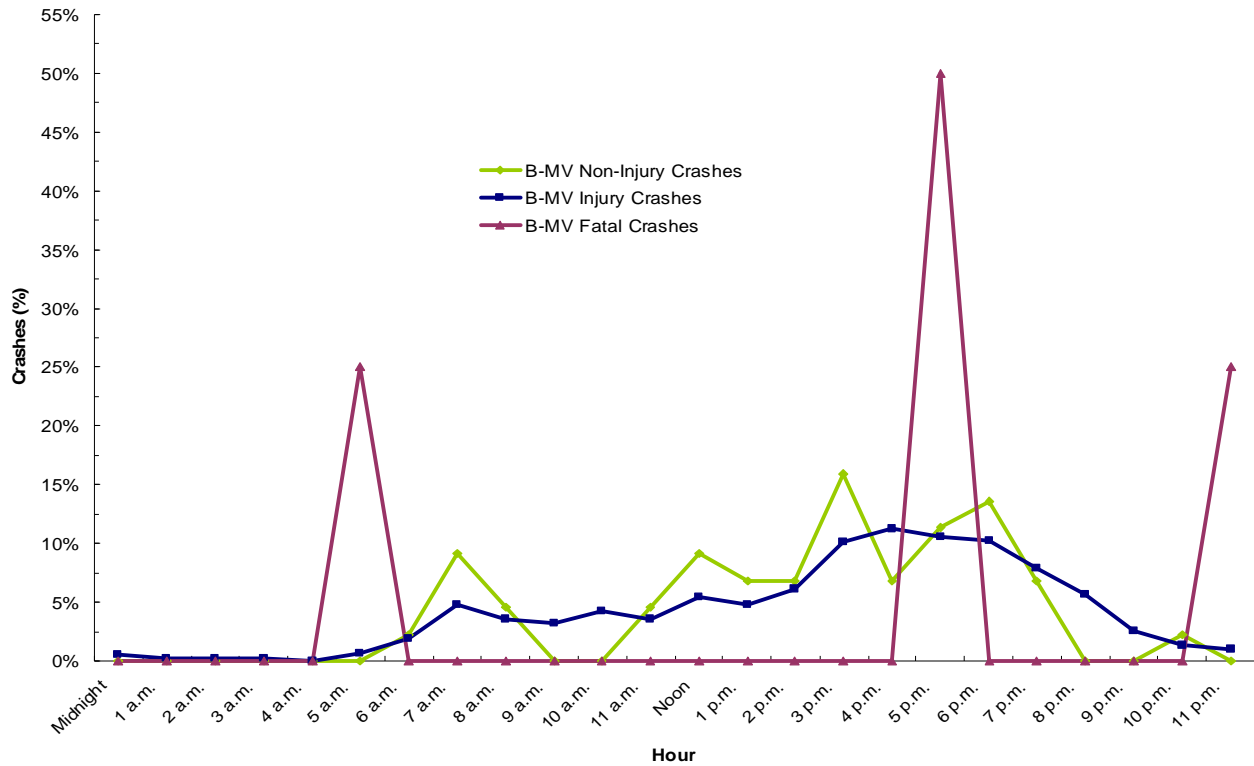
# Bicyclist-Motor Vehicle Crash Times

Table 4.04 and Figure 4.03 show that total bicyclist-motor vehicle crashes and injury crashes peaked during the late afternoon and early evening hours (3 p.m. to 6 p.m.).

Table 4.04 Hour of Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2002

Hour	B-MV Non-Injury Crashes		B-MV Injury Crashes		B-MV Fatal Crashes		B-MV Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Midnight	0	0.0%	3	0.5%	0	0.0%	3	0.5%
1 a.m.	0	0.0%	1	0.2%	0	0.0%	1	0.2%
2 a.m.	0	0.0%	1	0.2%	0	0.0%	1	0.2%
3 a.m.	0	0.0%	1	0.2%	0	0.0%	1	0.2%
4 a.m.	0	0.0%	0	0.0%	0	0.0%	0	0.0%
5 a.m.	0	0.0%	4	0.7%	1	25.0%	5	0.8%
6 a.m.	1	2.3%	11	1.9%	0	0.0%	12	1.9%
7 a.m.	4	9.1%	28	4.8%	0	0.0%	32	5.1%
8 a.m.	2	4.5%	21	3.6%	0	0.0%	23	3.6%
9 a.m.	0	0.0%	19	3.2%	0	0.0%	19	3.0%
10 a.m.	0	0.0%	25	4.3%	0	0.0%	25	3.9%
11 a.m.	2	4.5%	21	3.6%	0	0.0%	23	3.6%
Noon	4	9.1%	32	5.5%	0	0.0%	36	5.7%
1 p.m.	3	6.8%	28	4.8%	0	0.0%	31	4.9%
2 p.m.	3	6.8%	36	6.2%	0	0.0%	39	6.2%
3 p.m.	7	15.9%	59	10.1%	0	0.0%	66	10.4%
4 p.m.	3	6.8%	66	11.3%	0	0.0%	69	10.9%
5 p.m.	5	11.4%	62	10.6%	2	50.0%	69	10.9%
6 p.m.	6	13.6%	60	10.3%	0	0.0%	66	10.4%
7 p.m.	3	6.8%	46	7.9%	0	0.0%	49	7.7%
8 p.m.	0	0.0%	33	5.6%	0	0.0%	33	5.2%
9 p.m.	0	0.0%	15	2.6%	0	0.0%	15	2.4%
10 p.m.	1	2.3%	8	1.4%	0	0.0%	9	1.4%
11 p.m.	0	0.0%	6	1.0%	1	25.0%	7	1.1%
Grand Total	44	100.0%	585	100.0%	4	100.0%	633	100.0%

Figure 4.03 Hour of Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2002 (See Table 4.04 for values)



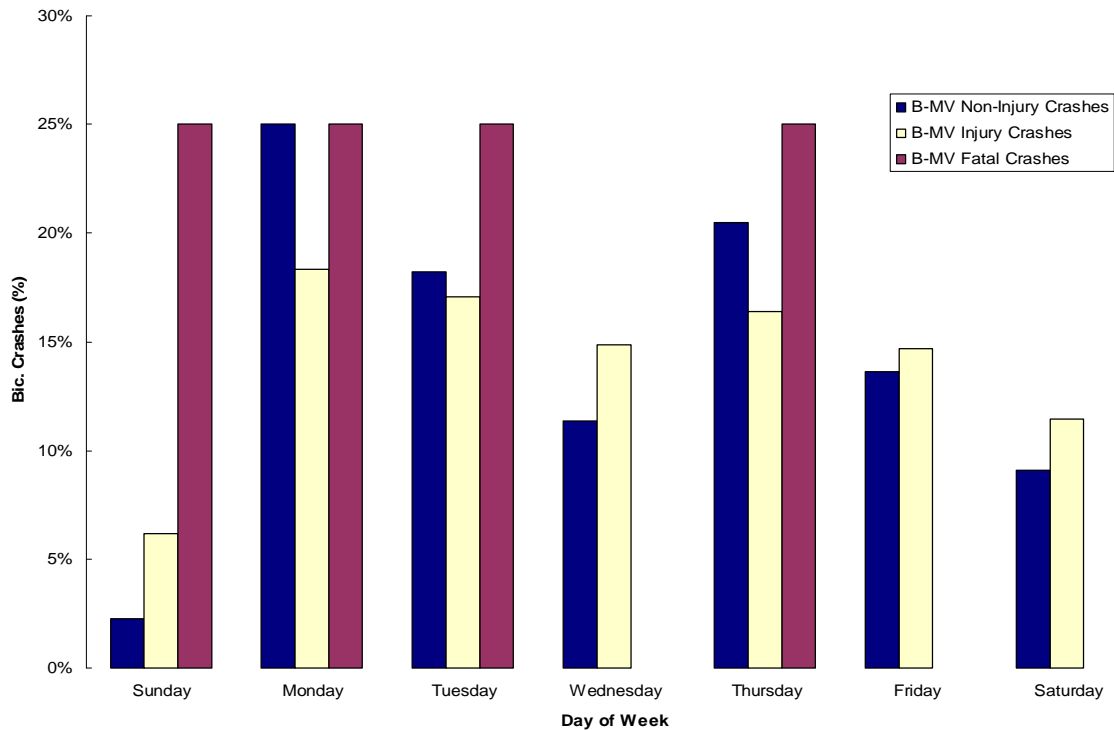
May through September had the highest rates of total bicyclist-motor vehicle crashes and injury crashes per day (Table 4.05).

Table 4.05 Month of Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2002

Crash Month	B-MV Non-Injury Crashes		B-MV Injury Crashes		B-MV Fatal Crashes		B-MV Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
January	1	2.3%	12	2.1%	1	25.0%	14	2.2%
February	2	4.5%	15	2.6%	0	0.0%	17	2.7%
March	3	6.8%	37	6.3%	0	0.0%	40	6.3%
April	5	11.4%	54	9.2%	0	0.0%	59	9.3%
May	4	9.1%	65	11.1%	1	25.0%	70	11.1%
June	6	13.6%	77	13.2%	0	0.0%	83	13.1%
July	5	11.4%	74	12.6%	1	25.0%	80	12.6%
August	7	15.9%	95	16.2%	0	0.0%	102	16.1%
September	3	6.8%	73	12.5%	0	0.0%	76	12.0%
October	6	13.6%	39	6.7%	0	0.0%	45	7.1%
November	1	2.3%	22	3.8%	0	0.0%	23	3.6%
December	1	2.3%	22	3.8%	1	25.0%	24	3.8%
Total	44	100.0%	585	100.0%	4	100.0%	633	100.0%

Figure 4.04 and Table 4.06 show that the highest percentage of total bicyclist-motor vehicle crashes and injury crashes occurred on Monday, while the lowest number occurred on Sunday.

Figure 4.04 Day of Week for Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2002



Note: The above graph is based on percentages for the different crash categories. To read the above graph, look at one category across the days of the week. For example, look at only the white bars (i.e. bicyclist-motor vehicle injury crashes) from day to day. Do not compare the heights of the different crash categories for a specific day.

Table 4.06 Day of Week for Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2002

Day of Week	B-MV Non-Injury Crashes		B-MV Injury Crashes		B-MV Fatal Crashes		B-MV Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Sunday	1	2.3%	36	6.2%	1	25.0%	38	6.0%
Monday	11	25.0%	107	18.3%	1	25.0%	119	18.8%
Tuesday	8	18.2%	100	17.1%	1	25.0%	109	17.2%
Wednesday	5	11.4%	87	14.9%	0	0.0%	92	14.5%
Thursday	9	20.5%	96	16.4%	1	25.0%	106	16.7%
Friday	6	13.6%	86	14.7%	0	0.0%	92	14.5%
Saturday	4	9.1%	67	11.5%	0	0.0%	71	11.2%
Missing	0	0.0%	6	1.0%	0	0.0%	6	0.9%
Total	44	100.0%	585	100.0%	4	100.0%	633	100.0%



# Bicyclist-Motor Vehicle Crash Characteristics

Large urban areas accounted for three-quarters (80.6%) of the total bicyclist-motor vehicle crashes and 75.0% of the fatal bicycle-motor vehicle crashes (Table 4.07).

Table 4.07 Urban / Rural Location of Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2002

Urban / Rural Location	B-MV Non-Injury Crashes		B-MV Injury Crashes		B-MV Fatal Crashes		B-MV Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Rural Area - Up to 5,000	3	6.8%	78	13.3%	1	25.0%	82	13.0%
Small Urban 5,000-49,999	2	4.5%	33	5.6%	0	0.0%	35	5.5%
Urban 50,000-199,999	1	2.3%	19	3.2%	0	0.0%	20	3.2%
Urban 200,000 or More	38	86.4%	449	76.8%	3	75.0%	490	77.4%
Missing	0	0.0%	6	1.0%	0	0.0%	6	0.9%
Total	44	100.0%	585	100.0%	4	100.0%	633	100.0%

Table 4.08 shows the type of vehicles involved in bicyclist-motor vehicle crashes. Over half (58.8%) of the vehicles involved in the total bicyclist-motor vehicle crashes were passenger cars.

Table 4.08 Type of Vehicles Involved in Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2002

Vehicle Type	B-MV Non-Injury Crashes		B-MV Injury Crashes		B-MV Fatal Crashes		B-MV Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Large/ Semi Truck	1	2.3%	3	0.5%	1	25.0%	5	0.8%
Light Truck, Van or SUV	15	34.1%	216	36.6%	2	50.0%	233	36.5%
Motorcycle	0	0.0%	5	0.8%	0	0.0%	5	0.8%
Other	1	2.3%	17	2.9%	0	0.0%	18	2.8%
Passenger Car	27	61.4%	347	58.8%	1	25.0%	375	58.8%
School Bus	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Grand Total	44	100.0%	590	100.0%	4	100.0%	638	100.0%

Note: More than one vehicle may be involved in a bicyclist-motor vehicle crash. Unknown vehicles are 'hit and run' vehicles.

# Bicyclist-Motor Vehicle Crash Violations and Contributing Factors

There were 634 drivers involved in bicyclist-motor vehicle crashes, of which 194 (30.6%) were cited for a traffic violation (Table 4.09). The leading violation was "failure to yield right of way" (46.4%). No drivers involved in fatal bicyclist-motor vehicle crashes received a citation at the scene.

Table 4.09 Violations for Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2002

Violations	B-MV Non-Injury Crashes		B-MV Injury Crashes		B-MV Total Crashes	
	Number	Percent	Number	Percent	Number	Percent
Failure to Yield Right of Way	5	50.0%	85	46.2%	90	46.4%
Improper Lookout	2	20.0%	34	18.5%	36	18.6%
Other Non-Moving Violations	1	10.0%	26	14.1%	27	13.9%
Red Light	0	0.0%	8	4.3%	8	4.1%
Negligent Collision	0	0.0%	7	3.8%	7	3.6%
Hit and Run	1	10.0%	5	2.7%	6	3.1%
Improper Turn	0	0.0%	5	2.7%	5	2.6%
Wrong Side of Road	0	0.0%	4	2.2%	4	2.1%
Stop Sign	0	0.0%	3	1.6%	3	1.5%
All Other Moving Violations	1	10.0%	1	0.5%	2	1.0%
Driving Under the Influence	0	0.0%	2	1.1%	2	1.0%
Speeding	0	0.0%	2	1.1%	2	1.0%
Improper Backing	0	0.0%	1	0.5%	1	0.5%
Improper Passing	0	0.0%	1	0.5%	1	0.5%
Total	10	100.0%	184	100.0%	194	100.0%

The factors contributing to bicycle-motor vehicle crashes are listed in Table 4.10. These factors were coded by the officers at the scene for motor vehicles involved in the crash. The officer may record up to two different contributing factors. The primary contributing factors recorded for total bicyclist-motor vehicle crashes and injury crashes were "improper lookout" and "failure to yield right of way." "Driving under the influence," "had been drinking," and "under the influence of drugs" accounted for 3.0% of contributing factors in total bicyclist-motor vehicle crashes and injury crashes.

Table 4.10 Contributing Factors of Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2002

Contributing Factors	B-MV Non-Injury Crashes		B-MV Injury Crashes		B-MV Fatal Crashes		B-MV Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Improper Lookout	13	28.9%	168	25.5%	0	0.0%	181	25.6%
Failed to Yield the Right of Way	11	24.4%	96	14.5%	0	0.0%	107	15.1%
Following Too Closely	4	8.9%	81	12.3%	0	0.0%	85	12.0%
Other Improper Driving	3	6.7%	62	9.4%	1	50.0%	66	9.3%
Speed Too Fast	0	0.0%	61	9.2%	1	50.0%	62	8.8%
Hit and Run	2	4.4%	26	3.9%	0	0.0%	28	4.0%
Improper Turn	1	2.2%	26	3.9%	0	0.0%	27	3.8%
Disregarded Traffic Signal	4	8.9%	18	2.7%	0	0.0%	22	3.1%
Asleep	3	6.7%	12	1.8%	0	0.0%	15	2.1%
Driving Under the Influence	0	0.0%	15	2.3%	0	0.0%	15	2.1%
Improper Backing	1	2.2%	12	1.8%	0	0.0%	13	1.8%
Non-Contact Vehicle Involved	0	0.0%	11	1.7%	0	0.0%	11	1.6%
Drove Left of Center	0	0.0%	10	1.5%	0	0.0%	10	1.4%
Improper Overtaking	0	0.0%	9	1.4%	0	0.0%	9	1.3%
Fatigued	2	4.4%	6	0.9%	0	0.0%	8	1.1%
Other Defective Condition	0	0.0%	8	1.2%	0	0.0%	8	1.1%
Cargo Loss or Shift	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Had Been Drinking	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Down Hill Runaway	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Passed Stop Sign	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Wrong Side of Road	0	0.0%	3	0.5%	0	0.0%	3	0.4%
Tires Defective	1	2.2%	2	0.3%	0	0.0%	3	0.4%
Other Defective Condition	0	0.0%	8	1.2%	0	0.0%	8	1.1%
Fatigued	2	4.4%	6	0.9%	0	0.0%	8	1.1%
Stolen	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Towed Vehicle	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Down Hill Runaway	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Improper Backing	1	2.2%	12	1.8%	0	0.0%	13	1.8%
Headlights Glaring	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Jackknife	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Sick or ill	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Improper Parking	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Cargo Loss or Shift	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Non-collision fire	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Separation of Units	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Total	45	100.0%	660	100.0%	2	100.0%	707	100.0%

# Drivers Involved in Bicyclist-Motor Vehicle Crashes

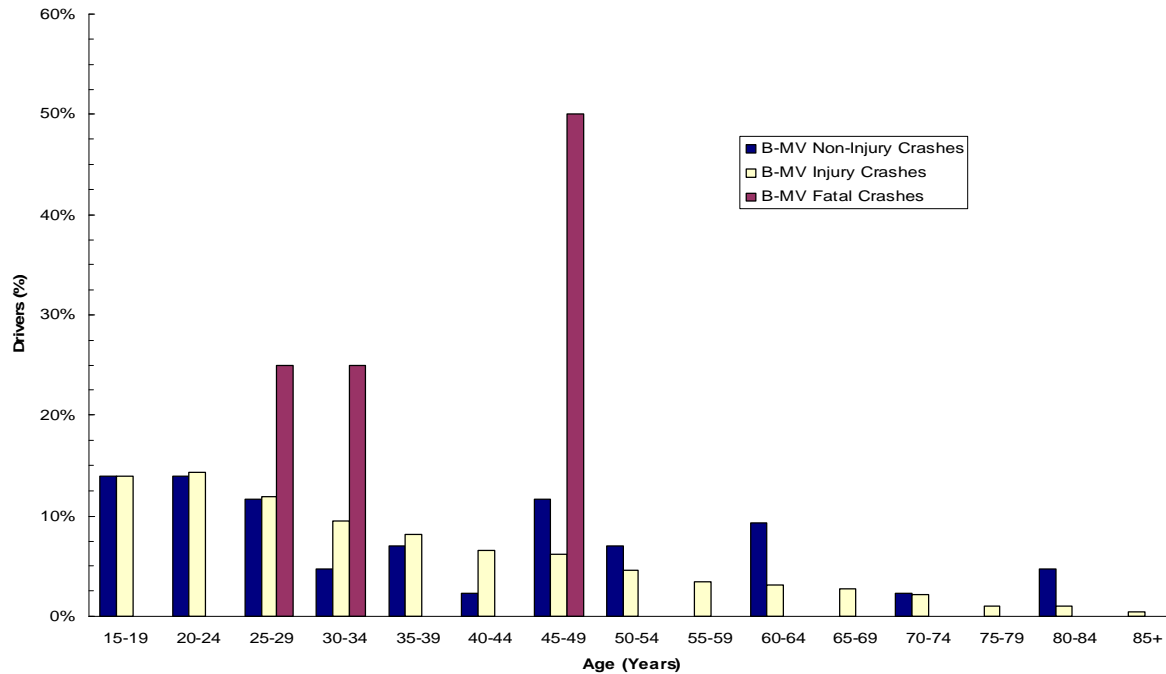
Drivers between the ages of 15 to 24 years represented the greatest percentage of motor vehicle drivers (28.1%) involved in a total bicyclist-motor vehicle crash, while drivers aged 45 to 49 years each accounted for 50.0% of drivers involved in fatal bicyclist-motor vehicle crashes (Table 4.11 and Figure 4.05).

Table 4.11 Age of Drivers Involved in Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2002

Driver's Age	B-MV Non-Injury Crashes		B-MV Injury Crashes		B-MV Fatal Crashes		B-MV Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
15-19	6	14.0%	82	14.0%	0	0.0%	88	13.9%
20-24	6	14.0%	84	14.3%	0	0.0%	90	14.2%
25-29	5	11.6%	70	11.9%	1	25.0%	76	12.0%
30-34	2	4.7%	56	9.5%	1	25.0%	59	9.3%
35-39	3	7.0%	48	8.2%	0	0.0%	51	8.0%
40-44	1	2.3%	38	6.5%	0	0.0%	39	6.2%
45-49	5	11.6%	36	6.1%	2	50.0%	43	6.8%
50-54	3	7.0%	27	4.6%	0	0.0%	30	4.7%
55-59	0	0.0%	20	3.4%	0	0.0%	20	3.2%
60-64	4	9.3%	18	3.1%	0	0.0%	22	3.5%
65-69	0	0.0%	16	2.7%	0	0.0%	16	2.5%
70-74	1	2.3%	13	2.2%	0	0.0%	14	2.2%
75-79	0	0.0%	6	1.0%	0	0.0%	6	0.9%
80-84	2	4.7%	6	1.0%	0	0.0%	8	1.3%
85+	0	0.0%	3	0.5%	0	0.0%	3	0.5%
Missing	5	11.6%	64	10.9%	0	0.0%	69	10.9%
Total	43	100.0%	587	100.0%	4	100.0%	634	100.0%

Note: More than one driver may be involved in bicyclist-motor vehicle crashes and driver information may be missing (e.g. a hit and run).

Figure 4.05 Age of Drivers Involved in Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2002  
(See Table 4.11 for values)



Note: The above graph is based on percentage for the different crash categories. To read the above graph, look at one category across the age groups. For example, look at only the white bars (i.e. drivers in bicyclist-motor vehicle injury crashes) from age group to age group. Do not compare the heights of the different crash categories for a specific age group.

Table 4.12 shows that over half (55%) of motor vehicle drivers involved in total bicycle-motor vehicle crashes, and injury bicycle-motor vehicle crashes were male.

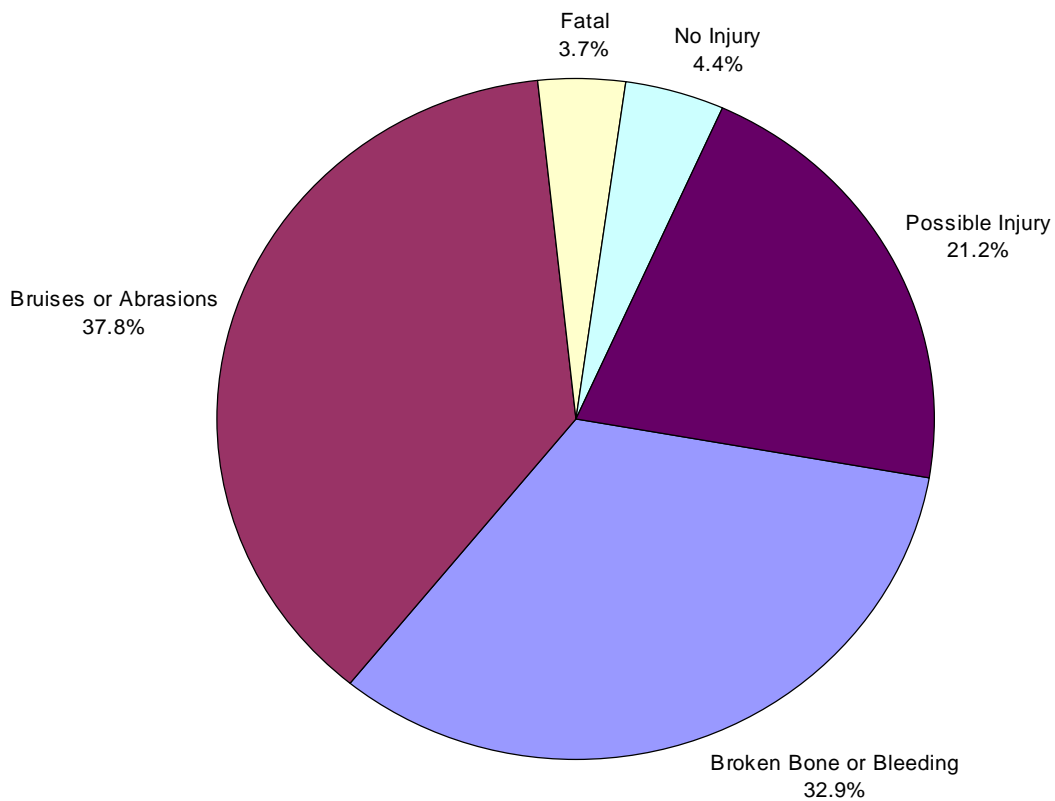
Table 4.12 Gender of Drivers Involved in Bicyclist-Motor Vehicle (B-MV) Crashes, Utah 2002

MV Driver's Gender	B-MV Non-Injury Crashes		B-MV Injury Crashes		B-MV Fatal Crashes		B-MV Total Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Female	18	41.9%	230	39.2%	0	0.0%	248	39.1%
Male	24	55.8%	323	55.0%	4	100.0%	351	55.4%
Unknown	1	2.3%	34	5.8%	0	0.0%	35	5.5%
Total	43	100.0%	587	100.0%	4	100.0%	634	100.0%

# Bicyclist Injury Severity

Figure 4.06 shows that the majority of bicyclists sustained an injury (95.6%) compared to 21.9% of all motor vehicle crash participants (Figure 2.03). The percentage of bicyclist fatalities (3.7%) was higher than for all motor vehicle crash participants (0.2%). There were 4 bicyclists killed on Utah public roadways in 2002, compared to 5 bicyclists killed during 2001.

Figure 4.06 Bicyclist Injury Severity as Reported by Police, Utah 2002 (n=633)



# Bicyclists by County

Table 4.13 shows the number of bicyclists, injured bicyclists and bicyclist fatalities involved in motor vehicle crashes by county. The leading counties for total bicyclists and injured bicyclists involved in a motor vehicle crash per million vehicle miles traveled were Salt Lake, Utah, and Weber Counties.

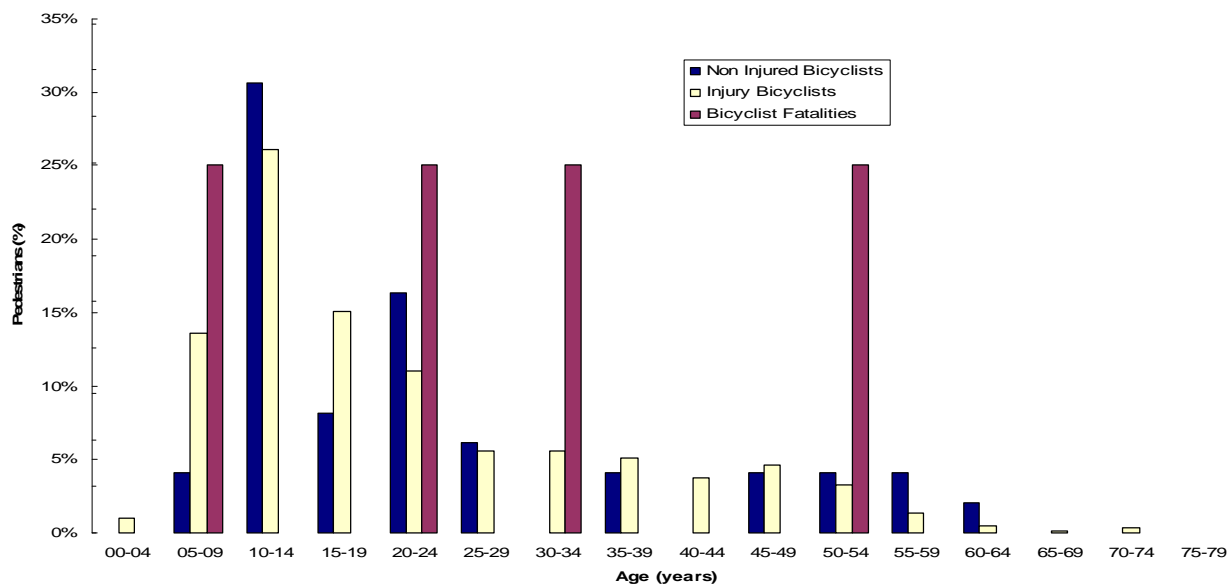
Table 4.13 Total Bicyclists, Injured Bicyclists and Bicyclist Fatalities by County, Utah 2002

County	Non-Injured Bicyclists			Injured Bicyclists			Bicyclist Fatalities			Total Bicyclists		
	Rate per		Population	Rate per		Population	Rate per		Population	Rate per		Population
	Number	MVMT		Number	MVMT		Number	MVMT		Number	MVMT	
Beaver	0	0.0	0.0	1	0.4	1.6	1	4.1	1.6	2	0.8	3.2
Box Elder	0	0.0	0.0	14	1.4	3.2	0	0.0	0.0	14	1.4	3.2
Cache	1	0.1	0.1	23	2.8	2.4	0	0.0	0.0	24	2.9	2.5
Carbon	1	0.3	0.5	3	0.9	1.5	0	0.0	0.0	4	1.2	2.0
Daggett	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Davis	4	0.2	0.2	47	2.0	1.9	0	0.0	0.0	51	2.2	2.0
Duchesne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Emery	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Garfield	0	0.0	0.0	1	0.7	2.1	0	0.0	0.0	1	0.7	2.1
Grand	0	0.0	0.0	2	0.7	2.4	0	0.0	0.0	2	0.7	2.4
Iron	0	0.0	0.0	5	0.8	1.4	0	0.0	0.0	5	0.8	1.4
Juab	0	0.0	0.0	2	0.5	2.3	0	0.0	0.0	2	0.5	2.3
Kane	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Millard	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Morgan	0	0.0	0.0	1	0.8	1.4	0	0.0	0.0	1	0.8	1.4
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Salt Lake	24	0.3	0.3	291	3.6	3.1	1	0.1	0.0	316	4.0	3.4
San Juan	0	0.0	0.0	3	1.1	2.1	0	0.0	0.0	3	1.1	2.1
Sanpete	0	0.0	0.0	2	0.9	0.8	0	0.0	0.0	2	0.9	0.8
Sevier	0	0.0	0.0	4	1.0	2.1	0	0.0	0.0	4	1.0	2.1
Summit	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Tooele	1	0.1	0.2	2	0.2	0.4	0	0.0	0.0	3	0.4	0.7
Uintah	0	0.0	0.0	5	1.7	1.9	0	0.0	0.0	5	1.7	1.9
Utah	14	0.4	0.4	119	3.6	3.0	0	0.0	0.0	133	4.0	3.4
Wasatch	0	0.0	0.0	3	1.1	1.8	0	0.0	0.0	3	1.1	1.8
Washington	1	0.1	0.1	12	1.2	1.2	0	0.0	0.0	13	1.3	1.3
Wayne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Weber	4	0.3	0.2	50	3.1	2.5	2	1.3	0.1	56	3.5	2.8
Statewide	50	0.2	0.2	590	2.6	2.5	4	0.2	0.0	644	2.8	2.8

# Bicyclist Characteristics

Figure 4.07 and Table 4.14 show that the majority of total bicyclists (65%) and injured bicyclists (65.8%) involved in a crash were between the ages of 5 to 24 years. Half (50%) of the fatalities were in this age group.

Figure 4.07 Age of Bicyclists Fatalities Involved in a Crash, Utah 2002



Note: The above graph is based on percentages for the different injury categories. To read the above graph, look at one category across the age groups. For example, look at only the white bars (i.e. injured bicyclist) from age group to age group. Do not compare the heights of the different injury categories for a specific age group.

Table 4.14 Age of Bicyclists, Utah 2002

Age	Non-Injured Bicyclists		Injured Bicyclists		Bicyclist Fatalities		Total Bicyclists	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
00-04	0	0.0%	6	1.0%	0	0.0%	6	0.9%
05-09	2	4.1%	80	13.6%	1	25.0%	83	12.9%
10-14	15	30.6%	154	26.1%	0	0.0%	169	26.3%
15-19	4	8.2%	89	15.1%	0	0.0%	93	14.5%
20-24	8	16.3%	65	11.0%	1	25.0%	74	11.5%
25-29	3	6.1%	33	5.6%	0	0.0%	36	5.6%
30-34	0	0.0%	33	5.6%	1	25.0%	34	5.3%
35-39	2	4.1%	30	5.1%	0	0.0%	32	5.0%
40-44	0	0.0%	22	3.7%	0	0.0%	22	3.4%
45-49	2	4.1%	27	4.6%	0	0.0%	29	4.5%
50-54	2	4.1%	19	3.2%	1	25.0%	22	3.4%
55-59	2	4.1%	8	1.4%	0	0.0%	10	1.6%
60-64	1	2.0%	3	0.5%	0	0.0%	4	0.6%
65-69	0	0.0%	1	0.2%	0	0.0%	1	0.2%
70-74	0	0.0%	2	0.3%	0	0.0%	2	0.3%
75-79	0	0.0%	0	0.0%	0	0.0%	0	0.0%
80-84	0	0.0%	1	0.2%	0	0.0%	1	0.2%
85+	0	0.0%	0	0.0%	0	0.0%	0	0.0%



The majority of the total bicyclists (80.3%) and injured bicyclists (80.7%) involved in crashes were male (Table 4.15).

Table 4.15 Gender of Bicyclists, Utah 2002

Bicyclist Gender	Non-Injured Bicyclists		Injured Bicyclists		Bicyclist Fatalities		Total Bicyclists	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Female	8	16.0%	114	19.3%	2	50.0%	124	19.3%
Male	39	78.0%	476	80.7%	2	50.0%	517	80.3%
Missing	3	6.0%	0	0.0%	0	0.0%	3	0.5%
Total	50	100.0%	590	100.0%	4	100.0%	644	100.0%

The actions of the bicyclist prior to the crash are shown in Table 4.16. The leading total bicyclists and injured bicyclists actions prior to the crash were “riding in roadway with traffic” and “riding in roadway against traffic”. The leading bicyclist action prior to crash for the bicyclists who died were “riding in roadway with traffic” and “crossing intersection against signal.”

Table 4.16 Bicyclist Action Prior to Crash, Utah 2002

Bicyclist Action	Non-Injured Bicyclists		Injured Bicyclists		Bicyclist Fatalities		Total Bicyclists	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Riding in Roadway With Traffic	11	22.0%	112	19.0%	2	50.0%	125	19.4%
Riding in Roadway Against Traffic	9	18.0%	87	14.7%	0	0.0%	96	14.9%
Crossing Intersection with Signal	8	16.0%	86	14.6%	0	0.0%	94	14.6%
Riding on Sidewalk	9	18.0%	67	11.4%	0	0.0%	76	11.8%
Crossing Intersection No Signal	2	4.0%	69	11.7%	0	0.0%	71	11.0%
Crossing Intersection Against Signal	4	8.0%	52	8.8%	2	50.0%	58	9.0%
Crossing Not at Intersection	4	8.0%	48	8.1%	0	0.0%	52	8.1%
Not Stated	2	4.0%	21	3.6%	0	0.0%	23	3.6%
Other in Roadway	1	2.0%	18	3.1%	0	0.0%	19	3.0%
Coming from Behind Parked Cars	0	0.0%	10	1.7%	0	0.0%	10	1.6%
Crossing Intersection Diagonally	0	0.0%	4	0.7%	0	0.0%	4	0.6%
Not in Roadway	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Walking To and From School	0	0.0%	1	0.2%	0	0.0%	1	0.2%
Walking on Sidewalk	0	0.0%	1	0.2%	0	0.0%	1	0.2%
Walking in Roadway Against Traffic	0	0.0%	1	0.2%	0	0.0%	1	0.2%
Standing on Crosswalk Median Island	0	0.0%	1	0.2%	0	0.0%	1	0.2%
(blank)	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lying on Roadway	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Getting On or Off Other Vehicle	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Getting On or Off Bus	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Pushing-Working on Veh in Roadway	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Walking in Roadway with Traffic	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Hitching on Vehicle	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Other Working in Roadway	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Missing	0	0.0%	10	1.7%	0	0.0%	10	1.6%
Total	50	100.0%	590	100.0%	4	100.0%	644	100.0%

### Alcohol and Other Drugs:

None of the fatal bicycle-motor vehicle crashes involved alcohol or other drugs.

### Bicyclists and Helmet

Helmet was not coded consistently at the time-of-crash for bicyclists and cannot be reported with accuracy. As a result, it is not included in this summary.